



Naseem Babu

Education

2020–Present Ph.D, Computer Science & Engineering, Indian Institute of Technology, Patna.

Classification of Time Series Data

CGPA: 8.0

2018–2020: M.Tech, Computer Engineering, Malaviya National Institute of Technology, Jaipur.

Mitigation of Sybil Attack in Mobile RPL Routing Protocol (Internet of Things)

CGPA: 7.38

2013–2017: B.Tech, Information Technology, Dr. Ambedkar Institute of Technology for Handicapped,

Kanpur.

Smart Home Automation using Google Assistant and Blynk app

Percentage: 73.32

Area of Interest

Machine Learning, Deep Learning, Artificial Intelligence, Brain Computer Interface, NeuroScience, Respiratory System, Electroencephalography (EEG), Audio-based Emotions Detection, and Audio Signal Processing.

Publications

Journal Articles

2023 Naseem Babu, J. Mathew, U. Satija, and V. A. Prasad, A Comparative Investigation of Traditional and PCA Data Augmentation for Scarce Respiratory Signal Classification, *IEEE Sensor Journal* (Submitted: Impact Factor: 4.325).

Conference Papers

- 2022 **Naseem Babu**, Jyoti Kumari, Jimson Mathew, Udit Satija, and Arijit Mondal. Multiclass categorisation of respiratory sound signals using neural network. In *2022 IEEE Biomedical Circuits and Systems Conference (BioCAS)*, pages 228–232, 2022.
- 2022 **Naseem Babu**, Prattipati Kumar, Jimson Mathew, and Udit Satija. Exploration of bonafide and spoofed audio classification using machine learning models. In *2022 IEEE 19th India Council International Conference (INDICON)*, pages 1–6, 2022.

Computer skills

Programming Python, C, Java, Keras, Tensorflow, Pandas, Numpy, Librosa, and MNE

Skills

Web HTML, CSS, JS, and JSP-Servlets

Technologies

Database SQL

Academic & Work Experience

- 2023 CS229: Computer Architecture Lab, IIT Patna
- 2022 High-End Workshop on Deep Learning Based Biomedical Systems, IIT Patna
- 2021 CS229: Computer Architecture Lab, IIT Patna
- 2021 Guest Lecturer in Parul University Gujrat India
- 2020 Teaching Assistant in MNIT Jaipur

Academic Achievements & Honours

- 2022 Grand Challenge Student Research Grant (BioCAS 2022), Grand Challenge on Respiratory Sound Signal Classification, 2022
- 2022 University Grant Commission fellowship for Ph.D. Research work (UGC-NET JRF 2022 Qualified)
- 2018 MHRD fellowship for M.Tech Research Work
- 2018 AIR 1893 in GATE 2018 (3 Times GATE Qualified)

Referees

Prof. Jimson Mathew

Dr. Udit Satija

Assistant Professor, Department of Electrical Engineering
Indian Institute of Technology Patna, India

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Prof. Vinod A Prasad

(Ph.D. Co-Supervisor)
 Professor, Department of
 Infocomm Technology
 Singapore Institute of Technology, Singapore
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